

Earth's Crust

DEAR TEACHER:

Thank you for allowing us to enrich your students' education with this program. We hope that our combined efforts will provide a worthwhile, enjoyable and 'smooth' Museum visit.

Please note:

Enter your bookings in your Daybook (forgotten bookings are disappointing).

Class size is 30 students.

Double check your confirmation ticket for accuracy and inform us of any changes immediately.

Cancellation policy:

7 days notice must be provided to avoid being charged for your program.

Call us at **988-0626** if you have any students with special needs in your class or if you prefer to have particular areas of the program emphasized.

Divide your class into two groups before arriving. One supervisor per group is required to follow behind the students.

Arrive early out of courtesy to our volunteers and for an optimal experience.

Have the admission fees collected before arriving and make the payment to the Museum box office (located on the main level) before the program's starting time. Please make cheques payable to The Manitoba Museum.

Class control remains the teacher's responsibility.

Lunches: A number of areas in the Museum complex or the surrounding area are suitable for lunch. Spaces cannot be reserved. For more information phone **988-0626**.

Jackets and lunches can be stored in pull-out racks located near the classrooms on the lower level of the Museum. Valuables should be left at home.

Call **988-0626** or write us if we can help you develop specific Museum activities or if you have questions, suggestions or concerns.

We appreciate hearing from the students and often display their posters and drawings if you would like to share them with us.

Enjoy your visit!

THE PROGRAM: Grades 5-10 (1 hour)

The characteristics of igneous, sedimentary and metamorphic rocks, a variety of minerals, the Precambrian Shield, and hard rock mining will be discussed. Students are actively involved in the examination of touchable specimens and a gallery tour of exhibits.

PROGRAM OUTLINE:

The program is presented in the Earth History Gallery. A special tour will include areas of that gallery and the mining display in the Boreal Forest Gallery.

1. Students are seated around tables in the Earth History Gallery for a 30 minute introduction to rocks and minerals using "hands on" specimens.
2. The class is divided in half for a 30 minute tour of geologic exhibits.

PRE-VISIT SUGGESTIONS:

1. Duplicate the word search and have the students look for the listed words. Discuss these new geological terms.
2. Name common household goods that we use everyday and which began as a rock to illustrate the importance of rocks and minerals in our lives (e.g., jewelry, dishes, cutlery, bricks, cement, glass, cars, T.V.'s).
3. On a map of Manitoba, locate and mark the locations of some of: the extent of ancient Lake Agassiz; moraines (Brandon, Tiger Hills and Pembina Hills); eskers and deltas (Bird's Hill; Carberry Sandhills).
4. How is the earth in the Whiteshell different from the earth around Winnipeg? Does it stick to your shoes when it is wet? Do the rivers flow slowly and quietly? Explain.

FOLLOW-UP ACTIVITIES:

1. To demonstrate crystals and crystal growth, grow salt crystals. Stir 3 tablespoons of salt into 1 cup of warm water until the salt is completely dissolved. Pour this solution into a shallow pan. Set it in a warm place so that the water will evaporate. After a few days check the edges of the pan for small white crystals of salt. Look at the crystals with a magnifying glass. They should be shaped like cubes because salt (Halite) belongs to the Cubic or Isometric Crystal System. Alum crystals are also easy to grow and the crystals will be bigger.
2. Bring rocks to school and attempt to identify them.
3. Visit Little Mountain Park and Stonewall Quarry Park where you can find fossils.
4. Look for fossils in Tyndall Stone on local buildings such as the Museum, Winnipeg Art Gallery, City Hall, Legislative Building, etc.

SCHOOL PROGRAMS SPONSORED BY:

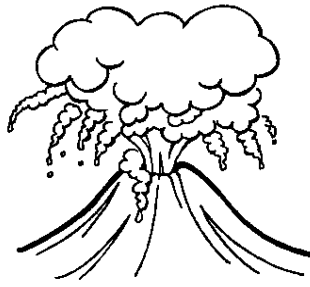
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EARTH'S CRUST



Word Search: Search in every direction

M	O	S	L	M	E	T	A	M	O	R	P	H	I	C	O
I	L	F	R	E	N	X	T	E	R	L	T	P	C	H	S
N	E	P	N	A	T	U	R	A	L	R	R	M	H	E	O
E	R	S	L	B	O	U	C	B	A	D	D	T	H	M	R
R	O	C	K	S	S	X	M	E	E	S	E	F	C	I	E
A	L	K	R	S	E	V	O	L	C	A	N	O	B	C	T
L	D	C	E	S	K	E	R	M	L	E	T	S	B	A	T
S	O	R	A	T	E	E	A	T	H	R	L	S	O	L	S
I	P	U	M	I	C	E	I	A	A	S	I	I	O	S	I
S	O	S	T	N	I	G	N	E	O	U	S	L	H	I	H
C	R	T	L	E	S	E	E	R	T	P	R	X	A	L	C
O	O	H	E	A	T	T	I	T	E	R	O	O	T	V	S
R	S	O	D	I	T	R	L	E	L	R	T	H	L	O	C
I	M	A	N	O	S	H	O	R	E	L	I	N	E	F	L
A	A	A	A	P	A	B	O	T	A	M	N	O	D	O	A
A	R	D	S	T	N	E	T	V	G	E	O	L	O	G	Y
G	B	V	A	L	D	R	A	A	L	K	C	O	B	U	Y
N	L	A	C	A	S	O	B	R	A	A	M	G	A	M	S
E	E	N	O	S	T	S	O	S	C	O	U	R	A	B	I
I	N	C	E	A	O	I	S	C	I	E	N	C	E	O	D
S	C	E	N	B	N	O	S	R	E	Y	A	L	A	B	O
S	E	D	I	M	E	N	T	A	R	Y	S	O	S	E	M

GLACIER
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EARTH
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